Fairfax County Police Officers Retirement System

A Pension Trust Fund of Fairfax County Virginia

Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 1999

Produced by the Fairfax County Retirement Administration Agency
10680 Main Street ~ Suite 280 ~ Fairfax, Virginia 22030

FAIRFAX COUNTY
V I R G I N I A

BOARD OF TRUSTEES
POLICE OFFICERS RETIREMENT SYSTEM
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December 30, 1999

Dear Members of the Board of Trustees:

We are pleased to submit to you the annual report of the Fairfax County Police Officers Retirement System ("System") for the fiscal year ended June 30, 1999. We hope this annual report will aid in understanding the structure and evaluating the status of the System. The System's management is responsible for the accuracy of financial information contained herein.

The annual report for fiscal year 1999 consists of five sections: an Introductory Section which contains this transmittal letter along with the organization structure and review of plan provisions; a Financial Section which contains the opinion of the independent auditors, the financial statements of the System and required supplementary information; an Investment Section which contains investment results; the Actuarial Section which contains the independent actuary's certification letter, a summary of the results of the actuarial valuation, and actuarial procedures and assumptions; and the Statistical Section which contains information regarding the System membership.

History

The Fairfax County Police Officers Retirement System was created under the authority granted by Chapter 303 of the Acts of Assembly (law of the Commonwealth of Virginia) on March 29, 1944 to provide defined pension plan coverage for sworn full-time law enforcement officers of the Fairfax County Police Department. In 1981, Fairfax County enacted Article 7 of the Fairfax County Code which adopted and continued Chapter 303 as amended. There were 1,049 active members and 560 retirees participating in the System as of June 30, 1999.

Benefit Provisions

The benefit provisions of the System are established by County Ordinance. The System provides normal service retirement and early service retirement benefits for members who attain age or service requirements. Coverage for service-connected disability benefits is immediate upon membership in the System. Ordinary (non-service related) disability benefits are provided after the attainment of five years of service. Members are vested after five years of service and are eligible for the benefits at the early or normal service retirement date.

Capital Markets, Economic Conditions and Outlook

Fiscal-Year 1999 Review

Fiscal-year 1999 ending June 30, turned out to be another stellar year for equity markets worldwide, but a lackluster year for fixed-income markets. The S&P 500 Index advanced 22.8%, marking the eleventh consecutive fiscal year of positive returns for the Index and an unprecedented fifth consecutive year of 20+% growth. US equity returns were again by far the best performer among major asset classes. The S&P 500 Index return was 7 times greater than the 3.1% return of the Lehman Brothers Aggregate Bond Index, and nearly tripled the 7.9% rate achieved by the MSCI EAFE Index, the leading equity index of international developed markets.

Despite the good returns of the S&P 500 Index, fiscal 1999 was a particularly bumpy road for equity markets. Fiscal 1999 started off with the broad market hitting record highs in mid-July, only to plunge sharply through the end of August, 1998, losing nearly 20% of value within two months. This correction was triggered by Russia's debt default and currency devaluation, which produced much panic selling and large losses for several US-based hedge funds, brokers and bankers. The Federal Reserve intervened with three quick actions to drop short-term interest rates 75 basis points to 4.75%. These actions served to calm worldwide concerns about recession and a credit crunch in capital markets, restored liquidity to credit markets and confidence among consumers, and allowed capital markets to rebound beyond pre-correction levels by the end of December. The S&P 500 Index recovered 21.3% during the fiscal second quarter. More "normal" gains of 5.0% and 7.0% ensued in the final two quarters of fiscal 1999. Altogether, the S&P 500 Index rose or fell more than 1.0% on a record 103 days of the year, underscoring the market's growing volatility.

Gains in 1999 were once again concentrated in the largest of the S&P 500 Index stocks, capping the fifth consecutive year that large-capitalization stocks have outperformed small-cap stocks. The small-cap sector, as measured by the Russell 2000 Index, gained only a stingy 1.5%, underperforming the S&P 500 Index by a huge 21.3 percentage points. "Growth" stocks outperformed "value" stocks across all capitalization ranges. Value investment managers were severely challenged to beat the market averages during fiscal 1999. Among industrial sectors, technology stocks were by far the primary driver of stock returns in all equity markets. Leadership within the stock market was once again very narrowly defined. The top ten stocks in the S&P 500 Index were all "growth" stocks, and represented 45% of the Index's positive return. This dominance of a handful of growth stocks masked the reality that 70% of the stocks in the S&P 500 Index actually trailed the Index for the year.

The public real estate market (REITs), tracking closely to the small-cap market, suffered one of its worst years in recent memory, down 5.3% for the year. This market could not overcome investors' perception that the industry had been over-aggressively bid up during the prior two years, as well as the waxing perception that this group was probably a "value play" rather than a rapid growth industry.

International developed markets achieved moderately favorable returns, as the MSCI Europe, Australia and Far East Index rose 7.9% for the year, despite an ongoing recession in Japan and a slowdown in many European economies. Emerging markets staged a strong rebound in price and confidence after the economic and currency crisis experienced in 1998. The MSCI Emerging Markets Free Index jumped 28.7%, recovering most of the year earlier's 39% fall.

Economic conditions in fiscal 1999 generally bolstered equity markets but served to keep a lid on expectations regarding the attractiveness of fixed-income markets. This positive environment for equities was supported by persistent economic growth, as the Gross Domestic Product for the nation grew at an above-average 3.8% for the year, on top of last year's 3.6% growth. Consumer spending was the main driver of economic growth, which was buoyed by ebullient consumer confidence. Strong corporate profits fueled continued business expansion which resulted in tremendous new job creation and a twenty-five year low in unemployment (4.2%). Despite moderately rising interest rates, technology-induced productivity gains again constrained inflation to below 2% over the twelve-month period.

Most of the economic indicators that equity investors construed favorably were viewed with concern by fixed-income investors. The consumer-driven economic growth was viewed as "over-heated", rising manufacturing rates were seen as leading to higher commodity prices, and rising employment and wage gains were believed to lead to inflating consumer prices. Compounding these concerns was constant rhetoric from Alan Greenspan, Chairman of the Federal Reserve, threatening to reign in "runaway" economic growth by raising short-term interest rates. The combined fear of rising inflation and Federal Reserve threats to raise interest rates kept many fixed-income investors on the sidelines just at the time when corporate America was coming to the market with record debt issuance to keep the economic infrastructure expanding. Consequently, the bellwether 30-year Treasury Bond Index yield drifted upwards 40 basis points from 5.6% at the beginning of the year to 6.0% by the end of fiscal 1999. Given this interest-rate environment, the benchmark Lehman Brothers Aggregate Bond Index's annual return was held to 3.1%.

System

Within this volatile capital market environment the System's investments advanced 8.6% for the fiscal year of 1999. This achievement was below the heady 17.8% and 22.1% gains of the prior two years, but ahead of the System's target 7.5% assumed actuarial rate of return. The market value of the System's assets increased 8.2%, from $532.8 million on June 30, 1998, to $576.3 million on June 30,1999. At year-end 1999, the System's investments were allocated as follows: Domestic and international equities – 57%; Fixed-income securities – 34%; and Publicly-traded equity REITs – 9%. Derivatives represented 17.3% of the investment portfolio by market value, consisting primarily of triple A-rated collateralized mortgage obligations. These securities were not of the speculative or leveraged variety.

Outlook

Looking forward to fiscal-year 2000, the economy is expected to exhibit strong momentum through the first half of the year, with some moderation of growth in the second half. Fiscal first-quarter 2000 Gross Domestic Product has been estimated at a stronger-than-expected 4.8%, proving that the summer slowdown was not as tepid as usual. Strong consumer and corporate spending have combined to fuel this acceleration. In addition, the manufacturing sector is awakening from its slumber and inventory rebuilding is replenishing the nation's stock of goods. Exports are starting to rise as global economies shake-off their economic malaise and absorb greater capital investment. Domestically, both consumers and corporations are expected to pause for a breather toward the end of the fiscal second quarter as the world waits to see what surprises Y2K has in store for us.

So far during this extended bull market run, technological improvements have boosted productivity gains in line with rising costs, thus keeping inflation in check with little price and cost increases. As fiscal 2000 unfolds, we would expect to see inflation pick up as commodity prices rise with surging global activity, and import prices rise as the US dollar weakens. Domestically, rising manufacturing output and tight labor markets are expected to exert greater upward pressure on prices. Not all corporate cost increases will be passed on, resulting in margin and earnings compression for corporate America.

The Federal Reserve has now tightened short-term interest rates 3 times in the last six months, taking back its 1998 rate reductions and restoring monetary policy to its 1997 pre-crisis equilibrium. These actions have stifled the fixed-income markets, moderated real estate construction, and are expected to slow the economy's momentum in the second half of fiscal-year 2000. Many analysts are expecting GDP growth to return to a more-normal 2.5% - 3.0% range.

We expect that the trend of increasing volatility in capital markets is likely to continue. The bull market, which began nine years ago in October 1990, has pushed the S&P 500 Index up 365% on a price-only basis, or 19.1% annualized. This performance is clearly unsustainable. The two periods in history most closely resembling the current bull-market period ended in the Great Depression in 1929, and the crash of 1987. Clearly, we would at least expect to see a gravitation toward the historic annual average market return of 11.3%, and a down year would not be totally unexpected.

The System's investments continue to be well-positioned and diversified. Any short-run downturn in the bond and equity markets would not have a material effect on the funded status of the System.

Financial Highlights

Internal and Budgetary Controls

The System's management is responsible for maintaining internal accounting controls to provide reasonable assurance that transactions are properly authorized and recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles. We believe the internal controls in effect during the fiscal year ended June 30, 1999, adequately safeguard the System's assets and provide reasonable assurance regarding the proper recording of financial transactions. In addition, the budget for the System is annually presented to and approved by the Board of Trustees and the County's Board of Supervisors.

Additions

The primary sources of additions for the System include member and employer contributions as well as net investment income. Total contributions and net investment income for fiscal year 1999 totaled $60.5 million, a decrease of $35.3 million versus fiscal year 1998.

Table 1. Contributions and Investment Income

	FY 1999 (millions)	FY 1998 (millions)	Increase/ (Decrease) Amount	Increase/ (Decrease) Percentage
Employer Contributions	$10.7	$11.3	$(0.6)	(5.3)%
Member Contributions	6.9	6.2	0.7	11.3%
Net Investment Income	43.0	78.2	(35.2)	(45.0)%
	$60.5	$95.8	$(35.3)	(36.8)%

Contributions

Contributions from Fairfax County decreased 5.3% over the prior year and produced 17.7% of total additions. The decrease in employer contributions was attributable to a decrease in the employer contribution rate from 21.79% of payroll in FY 1998 to 19.4% in FY 1999. This decrease was possible due to the strong investment gains of recent years which led to a decline in the amount required to amortize unfunded liabilities. Member contributions increased 11.3% over the prior year due to the higher payroll base, contributing 11.4% to total additions.

Investments

The net investment income portion of total additions decreased by $35.3 million or 45.0% in fiscal year 1999. Dividend and interest income increased by $1.0 million or 5.9%. Realized and unrealized gains on investments decreased $36.2 million or 57.5%. The market value of net assets increased to $576.3 million from $532.8 million.

Deductions

The deductions from the System include the payment of retiree and beneficiary payments, the refund of employee contributions to former members and administrative expenses. Deductions for fiscal year 1999 totaled $17.1 million, an increase of $1.7 million or 11% over the prior fiscal year.

Table 2. Deductions by Type

	FY 1999 (millions)	FY 1998 (millions)	Increase/ (Decrease) Amount	Increase/ (Decrease) Percentage
Benefits	$16.4	$14.7	$1.7	11.6%
Refunds	0.5	0.5	–	–
Administrative Expenses	0.2	0.2	–	–
	$17.1	$15.4	$1.7	11.0%

The increase in benefit payments to $16.4 million was due both to an increase in the number of retirees and growth in the average benefit payment. The number of retirees and beneficiaries increased to 560 at June 30, 1999 from 532 a year earlier. Retirees also received a 2.6% cost-of-living increase effective July 1, 1999.

Funded Status

An actuarial valuation of the System to determine funding requirements is performed annually. The System's funding policy provides for periodic employer contributions at actuarially determined rates which will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the costs of benefit payments when due. The valuation of the System performed as of July 1, 1998 indicated that the ratio of actuarial assets accumulated by the System to total actuarial accrued liabilities for benefits increased from 96.4% to 98.1%.

The Actuarial Section contains further information on the results of the July 1, 1998 valuation.

Investment Policies and Strategies

The Board of Trustees has an adopted Statement of Investment Objectives and Policy. This Statement establishes the investment goals, guidelines, constraints and performance standards the Trustees will use when exercising its fiduciary duties to manage the investment assets of the System. The Board operates in conformity with the standard of care required in making investments as stated in the Code of Virginia §26-45.1.A.

The Board receives quarterly reporting from staff and the System's investment consultant, William M. Mercer, to ensure compliance with its stated objectives and policy. Mercer also monitors the performance of the System and its investment managers; rate of return information is included in the Investment Section.

Securities of the System except for mutual funds and a short-term investment fund are held by State Street Bank and Trust Company, as agent, in the System's name. State Street Boston Corporation, the parent company, carries Financial Institution Bond insurance coverage including a Computer Crime Policy. An additional Excess Securities policy covers all risk of physical loss to securities.

Other Information

Independent Audit and Actuarial Certifications

An independent auditors' report and certifications from the actuary are included in this report.

Acknowledgements

The annual report of the Police Officers Retirement System was prepared by the System's staff under the leadership of the Board of Trustees. I would like to thank the staff who have worked hard throughout the year to ensure the successful operation of the System. This report is intended to provide complete and reliable information for determining the financial status of the System. It is being submitted to the Board of Supervisors and other interested parties.

Respectfully submitted,

Laurnz A. Swartz
Executive Director

BOARD OF TRUSTEES

ADMINISTRATIVE ORGANIZATION

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Laurnz A. Swartz
Executive Director

Jeffrey A. Willison
Investment Manager

Don A. McCorry
Retirement Administrator

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Investment Managers

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New York, NY

Capital Guardian Trust Company
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Cohen & Steers Capital Management, Inc.
New York, NY

Dodge & Cox, Investment Managers
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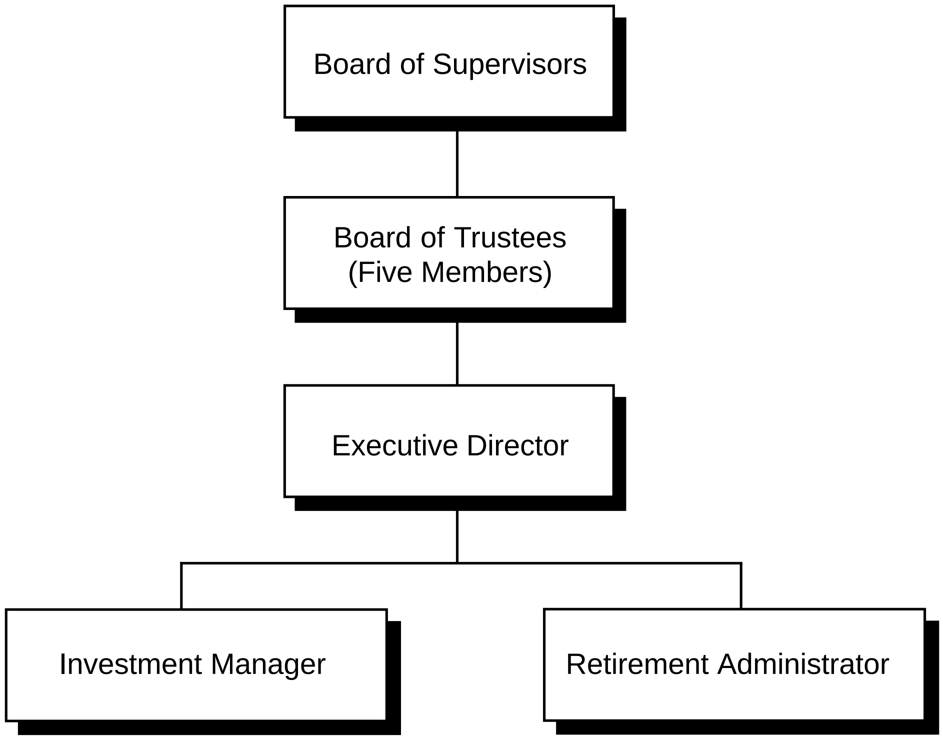
Richmond, VA

ORGANIZATIONAL CHART



SUMMARY OF PLAN PROVISIONS

Membership in the Fairfax County Police Officers Retirement System includes full-time sworn law enforcement officers in the Fairfax County Police Department.

The general provisions of the Police Officers Retirement System are as follows:

Contribution Rate: 12% of base salary (including roll call and holiday pay). Police Officers do not contribute to Social Security except Police Officers hired after April 1, 1986 contribute to Medicare.

Benefit: 2½% of average final compensation (highest consecutive three years) times creditable service up to a maximum of 75%. The total benefit is then increased by 3%.

Normal Retirement: is either age 55 or at least 25 years of creditable service (20 years if sworn in before July 1, 1981).

Early Retirement: is 20 years of creditable service if sworn in on or after July 1,1981.

Deferred Vested Retirement: is available for vested members (vesting is at 5 years of creditable service) who leave their contributions in the System when they terminate. These members are entitled to their normal retirement benefit based on service with the Police Department at age 55.

Service-Connected Disability Retirement: is available for members, regardless of their length of service, who become disabled as a result of a job-related illness or injury. Benefits for total disability are $66^{2}/_{3}$% of their average final compensation if sworn in on or after July 1, 1981. If sworn in before July 1, 1981, the total disability benefit is based on $66^{2}/_{3}$% of the salary the member would have received if he or she had not been disabled. Any member who is still disabled when they reach their normal retirement date will have their benefit reduced to 60% of the salary he or she would have received if he or she had not been disabled.

Ordinary Disability Retirement: is available for vested members who become disabled due to an injury or illness that is not job-related. Normal retirement benefits are paid (minimum is 10% of the member’s salary).

SUMMARY OF PLAN PROVISIONS
(Continued)

Death Benefits: *Before Retirement* — An automatic monthly benefit is payable to the spouse and children. This benefit equals $1,418.81 for the spouse (until remarriage before age 60) or surviving handicapped child (if there is no spouse) plus each eligible child receives $567.52 up to a total family benefit of $2,837.66 (these benefits are indexed to inflation). If the death occurred in the line of duty, the spouse or surviving handicapped child (if there is no spouse) may elect to receive 66⅔% of the member's regular salary at the time of death in lieu of the automatic benefits. If no automatic benefit is payable, contributions will be refunded to the member's beneficiary.

After Retirement — For those retiring on a regular service or service-connected disability retirement, an automatic monthly benefit is payable to the spouse and children. This benefit equals $1,418.81 for the spouse (until remarriage before age 60) or surviving handicapped child (if there is no spouse) plus each eligible child receives $567.52 up to a total family benefit of $2,837.66 (these benefits are indexed to inflation). In addition, memberswho retire on a regular service retirement may elect a Joint and Contingent Spouse and Handicapped Child option which provides 100%, 66⅔%, or 50% of the retiree's reduced benefit to the spouse or eligible handicapped child for life. The member's annuity is reduced by a percentage based on the difference in age between the member and his or her spouse. If the spouse pre-deceases the member, the annuity is restored to what it would have been if this option had not been elected. If no automatic benefit is payable, contributions not yet paid out in benefits will be refunded to the member's beneficiary.

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STATEMENTS OF PLAN NET ASSETS
as of June 30, 1999 and 1998

Assets	1999	1998
Equity in County's pooled cash and temporary investments	$2,572,039	$1,452,623
Accrued interest and dividends receivable	2,667,117	2,658,727
Investments, at fair value		
U.S. Government obligations	23,572,580	47,664,892
Asset-backed securities	102,423,215	91,197,002
Municipal bonds	814,793	5,691,704
Corporate bonds	57,572,611	51,015,646
Common and preferred stock	371,515,272	321,132,320
Mutual funds	4,302,523	0
Short-term investments	11,624,326	12,673,585
Cash collateral received under securities lending agreements	45,809,850	39,274,546
Total investments	617,635,170	568,649,695
Total assets	622,874,326	572,761,045
Liabilities		
Payable for collateral received under securities lending agreements	45,809,850	39,274,546
Accounts payable and accrued expenses	801,918	702,554
Total liabilities	46,611,768	39,977,100
Net assets held in trust for pension benefits	**$576,262,558**	**$532,783,945**

(A schedule of funding progress is presented on page 20.)

See accompanying notes to financial statements.

STATEMENTS OF CHANGES IN PLAN NET ASSETS

For the Years Ended June 30, 1999 and 1998

Additions	**1999**	**1998**
Contributions		
Employer	$10,685,734	$11,321,194
Plan members	6,861,605	6,235,043
Total contributions	17,547,339	17,556,237
Investment income		
From investment activities		
Net appreciation in fair value of investments	26,720,927	62,877,583
Interest	12,460,270	12,240,092
Dividends	6,277,900	5,456,166
Other	2,067	10,041
Total income from investment activities	45,461,164	80,583,882
Less investment activity expenses		
Investment management fees	2,334,973	2,223,038
Investment custodial fees	102,596	94,447
Investment consultant fees	113,440	71,131
Allocated administrative expense	79,494	76,869
Total investment activity expenses	2,630,503	2,465,485
Net income from investment activities	42,830,661	78,118,397
From securities lending activities		
Securities lending income	2,551,992	2,378,900
Securities lending expenses		
Borrower rebates	2,317,236	2,223,133
Management fees	82,172	55,901
Total securities lending expenses	2,399,408	2,279,034
Net income from securities lending activities	152,584	99,866
Total net investment income	42,983,245	78,218,263
Total additions	60,530,584	95,774,500
Deductions		
Annuity benefits	14,435,055	12,939,235
Disability benefits	1,132,922	1,006,406
Survivor benefits	860,258	820,017
Refunds	464,747	476,784
Administrative expense	158,989	153,738
Total deductions	17,051,971	15,396,180
Net increase	43,478,613	80,378,320
Net assets held in trust for pension benefits		
Beginning of fiscal year	532,783,945	452,405,625
End of fiscal year	**$576,262,558**	**$532,783,945**

See accompanying notes to financial statements.

NOTES TO THE FINANCIAL STATEMENTS

For the Year Ended June 30, 1999 and 1998

The Fairfax County Police Officers Retirement System ("System" or "plan") is a legally separate single-employer defined benefit pension plan established under the Code of Virginia to provide defined benefit pension benefits to certain Fairfax County, Virginia's ("County") police and park police officers. As such, the System is considered part of the County reporting entity and its financial statements are included in the County's general purpose financial statements as a pension trust fund.

A. Summary of Significant Accounting Policies

Basis of Accounting. The System's financial statements have been prepared under the accrual basis of accounting. Member and employer contributions to the plan are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due in accordance with the terms of the plan. The cost of administering the plan is paid by the System.

Method Used to Value Investments. Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Asset-backed securities are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. The System records investment purchases and sales as of trade date. These transactions are not finalized until settlement date, which occurs approximately three business days after the trade date. The amounts of trade receivables and payables are not separately disclosed due to immateriality. Cash received as collateral on securities lending transactions and investments made with such cash are reported as assets along with a related liability for collateral received.

Equity in County's pooled cash and temporary investments. The System maintains its cash with the County, which invests cash and allocates interest earned, net of a management fee, on a daily basis to the System based on the System's average daily balance of equity in pooled cash. As of June 30, 1999 and 1998, the bank balance of the County's public deposits was either insured by the Federal Deposit Insurance Corporation or through the State Treasury Board pursuant to the provisions of the Security for Public Deposit Act.

B. Plan Description and Contribution Information

Membership. At July 1, 1998, the date of the latest actuarial valuation, membership in the System consisted of:

Retirees and beneficiaries receiving benefits	532
Terminated plan members entitled to but not yet receiving benefits	2
Active plan members	1,030
Total	**1,564**

NOTES TO THE FINANCIAL STATEMENTS
(Continued)

Plan Description. The System is a single-employer defined benefit pension plan. The plan covers County police officers who are not covered by other plans of the County or the Virginia Retirement System and former Park Police officers who elected to transfer to the System effective January 22, 1983. Benefit provisions are established and may be amended by County ordinances. All benefits vest at five years of service. To be eligible for normal retirement, an individual must meet the following criteria: (a) if employed before July 1, 1981; attained the age of 55 or completed 20 years of service, or (b) if employed on or after July 1, 1981; attained the age of 55 or completed 25 years of service. The normal retirement benefit is calculated using average final compensation (i.e., the highest 78 consecutive two week pay periods) and years (or partial years) of service at date of termination. The plan provides that unused sick leave credit may be used in the calculation of average final compensation by projecting the final salary during the unused sick leave period. To be eligible for early retirement, the employee must have 20 years of service (does not apply if hired before July 1, 1981). Benefits are determined based on the normal retirement benefit calculated using average final compensation and service at early retirement actuarially reduced.

Annual cost-of-living adjustments are provided to retirees and beneficiaries equal to the lesser of 4 percent or the percentage increase in the Consumer Price Index for the Washington Consumer Metropolitan Service Area.

Contributions. The contribution requirements of System members are established and may be amended by County ordinances. Member contributions are based on 12 percent of compensation. The County is required to contribute at an actuarially determined rate; the rates for the year ended June 30, 1999 and 1998 were 19.40 percent and 21.79 percent of annual covered payroll, respectively.

C. Investments

The authority to establish the System is set forth in Chapter 303 of the Acts of Assembly (law of the Commonwealth of Virginia). Section 26-40 of the *Code of Virginia* (Code) authorizes the System to purchase the following investments:

Obligations of the Commonwealth of Virginia and its instrumentalities
U.S. Treasury and agency securities
Obligations of counties, cities, towns, and other public bodies located within the Commonwealth of Virginia
Obligations of state and local governmental units within other states
Obligations of the International Bank for Reconstruction and Development
Obligations of the Asian Development Bank
Obligations of the African Development Bank

In addition, the Code provides that the System may purchase other investments for pension funds (including common and preferred stocks and corporate bonds) that meet the standard of judgment and care set forth in Section 26-45.1 of the Code.

As permitted by the Code described above, the System invests in derivative instruments on a limited basis in accordance with Board of Trustees' policy. During the fiscal year, the System invested directly in various derivatives including asset-backed securities, collateralized mortgage obligations (CMOs), forward currency contracts, and floating rate securities. Investment managers are specifically prohibited from purchasing securities on margin or leverage.

NOTES TO THE FINANCIAL STATEMENTS
(Continued)

The System entered into these investments either to increase earnings or to hedge against potential losses. These investments generally contain market risk resulting from fluctuations in interest and currency rates. The credit risk of these investments results from the creditworthiness of the counter-parties to the contracts. An additional credit risk related to the asset-backed securities and CMOs results from the creditworthiness of the related consumers or mortgagees. In addition, the System has indirect exposure to market and credit risk through its ownership interests in certain mutual funds which hold derivative financial instruments.

At June 30, 1999 and 1998, investments in derivatives, including related mutual funds, represented 17.3 and 13.7 percent of the total fair value of the System's portfolio. Throughout the fiscal year ended June 30,1999, investments in derivatives ranged from 17.3 percent to 13.7 percent of the portfolio's fair value. Throughout the fiscal year ended June 30, 1998, investment in derivatives ranged from 7.1 percent to 13.7 percent of the portfolio's fair value.

The System does not have investments (other than U.S. government and U.S. government guaranteed obligations) in any one organization that represent 5 percent or more of net assets available for benefits. All investments, except for the mutual funds, short-term investment fund, and short-term collateral investment pool, are held by an unaffiliated custodian in the name of the System. Investment decisions for these assets are made by the Board of Trustees or investment managers selected by the Board.

Board of Trustees policies permit the System to lend its securities to broker-dealers and other entities (borrowers) for collateral that will be returned for the same securities in the future. The System's custodian is the agent in lending the plan's domestic securities for collateral of 102 percent and international securities for collateral of 105 percent. The custodian receives cash or securities as collateral. All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in the lending agent's collective collateral investment pool, which at year end has a weighted average duration of 76 days and a weighted average maturity of 416 days. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of securities loans made by other plan entities that invest cash collateral in the investment pool, which the System cannot determine.

The System did not impose any restrictions during the period on the amounts of loans the lending agent made on its behalf, and the agent indemnifies the System by agreeing to purchase replacement securities, or return the cash collateral thereof, in the event a borrower fails to return loaned securities or pay distributions thereon. There were no such failures by any borrower during the fiscal year, nor were there any losses during the period resulting from a default of the borrower or lending agent.

Securities lent for securities collateral are classified in the following schedule of investments according to the category of the collateral received. Securities lent at year-end for cash collateral are unclassified as the cash collateral is invested in a collective collateral investment pool. At year end, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System.

As of June 30, 1999 and 1998, the market value of securities on loan were $44,438,019 and $39,565,980, respectively. Cash received as collateral and the related liabilities of $45,809,850 as of June 30, 1999 and $39,274,546 as of June 30, 1998 are shown on the Statements of Plan Net Assets. Securities received as collateral are not reported as assets since the System does not have the ability to pledge or sell the collateral securities absent borrower default.

NOTES TO THE FINANCIAL STATEMENTS
(Continued)

The System's investments are categorized to give an indication of the level of risk assumed by the System at year end. Category 1 includes investments that are insured or registered or for which the securities are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by a counterparty's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by a counterparty or its trust department or agent, but not in the System's name. All of the System's investments meet the criteria of Category 1, except investments in mutual funds, a short-term investment fund, a short-term collateral investment pool and those securities on loan for which the cash collateral is invested in the collateral investment pool. These investments by their nature are not required to be categorized.

A schedule of investments as of June 30, 1999 and 1998 follows:	1999	1998
Categorized investments		
U.S. Government obligations	$7,934,710	$32,154,119
Asset-backed securities	102,423,215	91,197,002
Municipal bonds	814,793	5,691,704
Corporate bonds	57,112,602	51,015,646
Common and preferred stock		
Not on securities loan	343,175,132	297,077,113
On securities loan for securities collateral	43,569	1,082,081
Total categorized investments	511,504,021	478,217,665
Uncategorized investments		
Short-term investment fund	11,624,326	12,673,585
Mutual funds	4,302,523	0
Securities lending short-term collateral investment pool	45,809,850	39,274,546
Investments held by broker dealers under securities loans with cash collateral:		
U.S. Government obligations	15,637,870	15,510,773
Corporate bonds	460,009	0
Common and preferred stock	28,296,571	22,973,126
Total uncategorized investments	106,131,149	90,432,030
Total investments	**$617,635,170**	**$568,649,695**

D. Income Taxes

The Internal Revenue Service issued a determination letter on February 23, 1995, which stated that the System and its underlying trust qualify under the applicable provisions of the Internal Revenue Code and therefore are exempt from federal income taxes. In the opinion of the plan administrator, the System and its underlying trust have operated within the terms of the System and are qualified under the applicable provisions of the Internal Revenue Code.

REQUIRED SUPPLEMENTARY INFORMATION

Six-year historical trend information about the System is presented herewith as required supplementary information. This information is intended to help users assess the System's funding status on a going-concern basis, assess progress made in accumulating assets to pay benefits when due, and make comparisons with other public employee retirement systems.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/93	$230,962,091	$286,724,532	$55,762,441	80.55%	$41,695,944	133.74%
7/1/94	253,506,303	311,661,932	58,155,629	81.34%	43,064,972	135.04%
7/1/95	284,506,069	346,712,876	62,206,807	82.06%	45,743,970	135.99%
7/1/96	343,288,369	388,917,113	45,628,744	88.27%	49,065,647	93.00%
7/1/97	399,772,825	414,534,604	14,761,779	96.44%	50,307,487	29.34%
7/1/98	434,259,212	442,727,265	8,468,053	98.09%	51,955,916	16.30%

Analysis of the dollar amounts of plan net assets, actuarial accrued liability, and unfunded actuarial accrued liability in isolation can be misleading. Expressing plan net assets as a percentage of the actuarial accrued liability provides one indication of the System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system. Trends in the unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the system's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the system.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Annual Required Contribution	Percentage Contributed
1994	$ 9,560,424	100%
1995	10,013,355	100%
1996	10,912,200	100%
1997	11,892,690	100%
1998	11,321,194	100%
1999	10,685,734	100%

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	July 1, 1998
Actuarial cost method	Entry age
Amortization method	Level percent closed
Remaining amortization period	Weighted average of 6.2 years
Asset valuation method	3-Year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.5%
Projected salary increases*	4.5%-8.0%
*Includes inflation at	4.0%
Cost-of-living adjustments	3.0%

The actuarial assumptions used have been recommended by the actuary and adopted by the System's Board of Trustees based on the most recent review of the System's experience, completed in 1996.

The rate of employer contributions to the plan is composed of the normal cost, amortization of the unfunded actuarial liability and an allowance for administrative expenses. The normal cost is a level percent of pay cost which, along with the member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability. The allowance for administrative expenses is based upon the plan's actual administrative expenses.

Investment gains have resulted in a decrease in the unfunded actuarial liability as of valuation date. The result is an employer contribution rate of 18.4 percent for the fiscal year ending June 30, 2000, a decrease of 1.0 percent from the fiscal year 1999 rate of 19.4 percent.

REQUIRED SUPPLEMENTARY INFORMATION – YEAR 2000

Introduction

The year 2000 problem, as generally understood, results from the fact that many computer programs and computer files utilize only two characters to designate the year (e.g. 97 for 1997). Although that worked very well and saved considerable space over the years, a two-digit representation for a year does not lend itself to date comparisons or date computations when one or more of the dates fall within the next millennium. The County has undertaken the Year 2000 activity for the System with regards to the functions performed by the County. The System is also reliant on investment managers, the custodian bank and the County's primary financial institution. The activity and progress with respect to resolving the Year 2000 problem is described below in stages, in accordance with the Governmental Accounting Standards Board Technical Bulletins No. 98-1 and No. 99-1:

Awareness Stage

The Retirement Administration Agency (Agency), which administers the System, was instructed to prepare quarterly reports to the County Board of Supervisors on the status of the year 2000 issue. The reports are to include an assessment of the possible effect of the Year 2000 problem on the local area network servers, personal computers and Agency-unique PC/LAN applications.

The major areas of concern for the Agency are:

1. Agency system software used for computing the amount of retirement benefits, maintaining the master file and contribution updates, the processing of benefit payments and the preparation of annual 1099 forms.
2. Personal computers and Agency-supported local area networks.
3. The County's central mainframe applications used by the Agency.
4. Non-County suppliers of critical services – investment managers, custodian bank.

Assessment Stage

The Agency system software was defined as mission-critical. Assessment of the system software was performed in 1997 and a remediation schedule was prepared. A schedule for testing of the Agency's personal computers and local area network servers was developed. The County defined the central mainframe applications as mission-critical. In early 1997 the assessment of mainframe applications was completed and remediation work was scheduled. The investment managers and custodian bank were asked to confirm that their operating and record-keeping systems would be effectively operating into the year 2000. The investment managers were also asked to explain the procedures that had been incorporated into their analysis to evaluate the year 2000 impact upon the companies in which the investment managers are investing on behalf of the System.

Remediation Stage

The Agency completed modifications to its system software in early 1999. As of June 30, 1999, the Agency has completed 100% of the necessary modifications to the personal computers and local area network. As of June 30, 1999, the County has completed 90% of the required modifications to its central mainframe applications. The Agency has received extensive reports and updates from all of the investment managers and the custodian bank regarding the steps they have taken in managing their internal systems and those of their vendors.

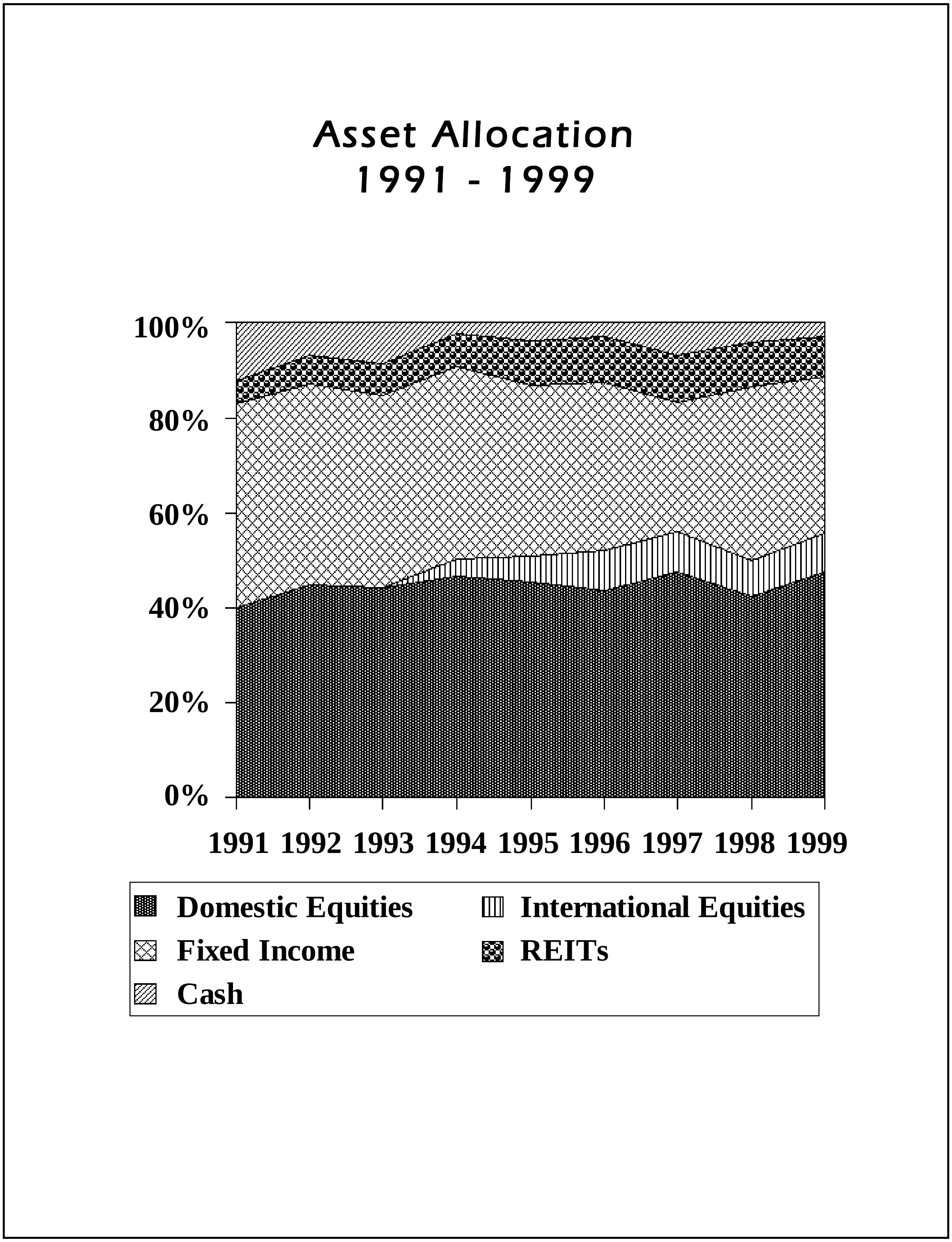
Validation/Testing Stage

The Agency performed testing of the modifications to its system software in conjunction with the modifications. The County has performed testing of the required modifications to its central mainframe applications. The Agency has completed testing of the modifications made to the personal computers and local area network. The Investment staff of the Agency is continuing to monitor the actions taken by the investment managers and custodian bank, as direct testing of the managers' and bank's systems by the Agency is not feasible. The completion of these stages is not a guarantee that computer systems and other electronic equipment will be Y2K compliant.

ASSET ALLOCATION BY CATEGORY AND INVESTMENT MANAGER

Asset Class Manager	Investment Style	Total Assets	% of Total Assets
Domestic Equities			
Credit Suisse	Active Large Cap Core	$111,641,796	19.4%
Robert E. Torray	Active Large Cap Value	114,876,861	19.9%
Furman Selz	Active Small Cap Growth	53,356,080	9.2%
International Equities			
Capital Guardian	Active EAFE	50,369,351	8.7%
Real Estate			
Cohen & Steers	Active Equity REITs	50,453,912	8.7%
Domestic Fixed Income			
Dodge & Cox	Active Core	93,301,555	16.2%
Global Fixed Income			
Credit Suisse	Active Core	100,466,058	17.4%
Cash Held by County Treasurer	Active Short Term	2,598,863	0.5%
Total Assets*		**$577,064,476**	**100.0%**

** Without Cash Collateral*


Asset Allocation
1991 - 1999
100%
80%
60%
40%
20%
0%
1991 1992 1993 1994 1995 1996 1997 1998 1999
Domestic Equities
International Equities
Fixed Income
REITs
Cash

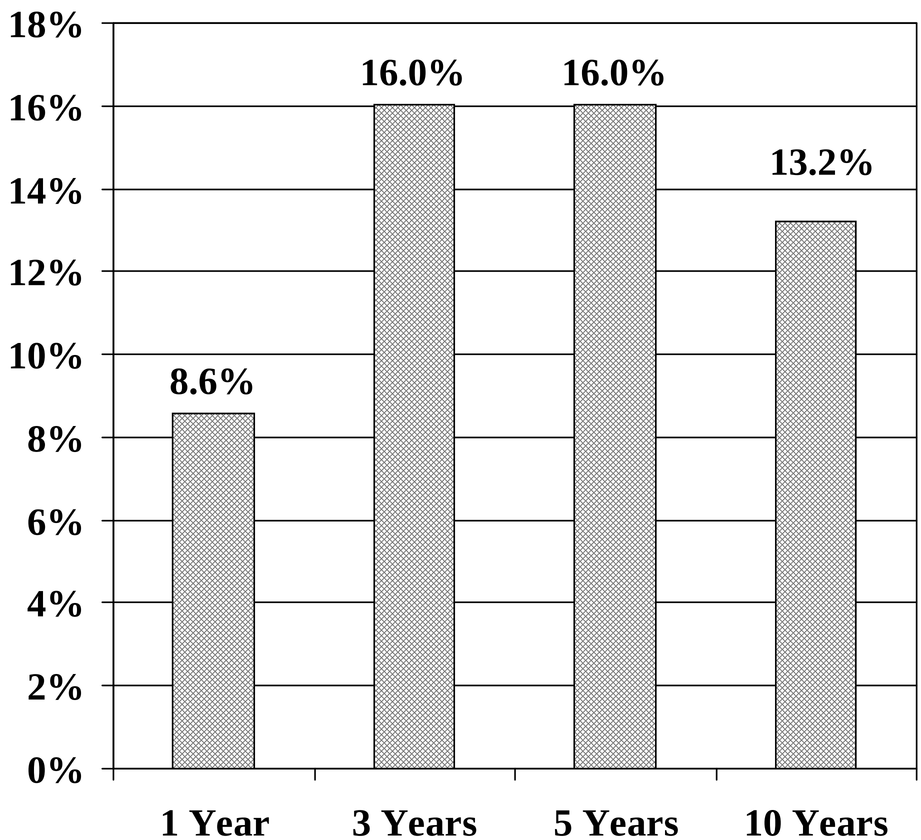
LIST OF LARGEST ASSETS HELD

(June 30, 1999)

Fifteen Largest Equity Holdings	Shares	Market Value
Citigroup Inc.	190,149	$ 9,032,078
AT&T Corp.	160,200	$ 8,941,163
International Business Machines Corp.	52,100	$ 6,733,925
SLM Holding Corp.	118,300	$ 5,419,619
Cisco Systems, Inc.	84,000	$ 5,412,750
J.P. Morgan & Company, Inc.	37,900	$ 5,324,950
Boston Scientific Corp.	119,000	$ 5,228,563
Electric Data Systems Corp.	90,600	$ 5,130,225
General Motors Corp.	88,000	$ 4,955,500
American Express Co.	38,000	$ 4,944,750
Bristol-Myers Squibb Co.	68,800	$ 4,846,100
Illinois Tool Works, Inc.	59,100	$ 4,831,425
Bank One Corp.	73,323	$ 4,367,301
Amgen Inc.	68,300	$ 4,157,763
Chase Manhattan Corp.	47,900	$ 4,143,350

Fifteen Largest Fixed Income Holdings	Interest Rate	Maturity Date	Market Value
Federal National Mortgage Assn. Single Family July 30-year TBA	6.000%	July, 2029	$ 9,816,521
Federal National Mortgage Assn. Single Family July 30-year TBA	8.000%	July, 2029	$ 9,450,056
Federal National Mortgage Assn. Single Family July 30-year TBA	6.500%	July, 2029	$ 7,036,307
United State Treasury Bonds	8.000%	November 15, 2021	$ 5,542,425
Government National Mortgage Assn. Single Family July 30-year TBA	6.500%	July, 2029	$ 5,013,112
United State Treasury Notes	6.875%	July 31, 1999	$ 5,007,800
Federal National Mortgage Assn.	6.000%	March 25, 2008	$ 4,923,400
Federal National Mortgage Assn. Single Family July 30-year TBA	7.000%	July, 2029	$ 4,497,402
Federal National Mortgage Assn. Single Family July 15-year TBA	6.000%	July, 2014	$ 4,006,733
Federal Home Loan Mortgage Corp.	6.000%	October 15, 2008	$ 3,700,763
Federal Home Loan Mortgage Corp.	7.000%	August 15, 2007	$ 3,544,835
Federal National Mortgage Assn.	6.250%	March 25, 2009	$ 2,817,054
United State Treasury Notes	3.875%	January 15, 2009	$ 2,817,054
United State Treasury Notes	6.250%	April 30, 2001	$ 2,784,815
Federal National Mortgage Assn. Pool #481427	6.000%	January 1, 2029	$ 2,681,509

Compound Annual Return on Investment Portfolio



MILLIMAN & ROBERTSON, INC.
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Internationally WOODROW MILLIMAN

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Telephone: 703/917-0143
Fax: 703/827-9266

October 14, 1999

Board of Trustees
Fairfax County Police Officers
Retirement System
10680 Main Street - Suite 280
Fairfax, VA 22030-3805

Dear Members of the Board:

At your request, we have performed our annual actuarial valuation of the Fairfax County Police Officers Retirement System as of July 1, 1998. The results of the valuation are contained in this report.

Funding Objective

The funding objective of the System is to establish contribution rates which, over time, will remain level as a percent of payroll. In order to achieve this, a contribution rate has been determined which will provide for current cost (i.e., normal cost expressed as a level percent of payroll) plus level percent of payroll amortizations of each layer of the unfunded liability over a 15 year period. This funding objective is currently being realized.

Assumptions

The actuarial assumptions used in this valuation have been recommended by the actuary and adopted by the Board of Trustees based upon the most recent review of the System's experience completed in 1997. We believe the assumptions used, in the aggregate, represent our best estimate of future experience of the plan.

While there were no changes in assumptions this year, there was a decision made by the Board to withhold a portion of the investment gains realized through the July 1, 1998 valuation date in order to absorb the known investment losses that occurred through the end of September.

The assumptions and methods used in performing this valuation meet the parameters set for disclosure presented in the financial section by Government Accounting Standards Board (GASB) Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans.*

Reliance on Others

In preparing our report, we relied, without audit, on information (some oral and some in writing)

Albany, Atlanta, Boise, Boston, Chicago, Dallas, Denver, Hartford, Houston, Indianapolis, Irvine, Los Angeles, Milwaukee, Minneapolis, New York, Omaha, Philadelphia, Phoenix, Portland, ME, Portland, OR, St. Louis, Salt Lake City, San Diego, San Francisco, Seattle, Tampa, Washington, D.C., Bermuda, Tokyo
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Board of Trustees Fairfax County
Police Officers Retirement System
October 14, 1999
Page 2

supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found the data to be reasonably consistent and comparable with data used in the prior valuation.

Supporting Schedules

We were responsible for all supporting schedules to be found in the Actuarial Section.

We were responsible for all years of the Schedule of Funding Progress, Schedule of Employer Contributions and Notes to Trend Data shown in the Financial Section.

Compliance with Code of Virginia §51.1-800

Code of Virginia §51.1-800 requires that the benefits provided a retiree at age 65 from a local retirement system equal or exceed two-thirds of the allowance to which the employee would be entitled under the provisions of the Virginia Retirement System (VRS). The Board of Trustees of the VRS is to determine whether a local system satisfies this condition, taking into account differences in member contributions between the local system and the VRS.

Although there is no formal procedure for making this comparison, we have compared the least valuable accrual rate under the Police Officers' Plan to the most valuable accrual rate under the VRS, making adjustments for the fact that employee contributions are required in excess of the VRS 5% rate. The employer provided accruals rates do exceed $^2/_3$ of the employer provided accrual rates under the VRS plan.

I certify that, to the best of my knowledge and understanding, the Fairfax County Police Officers Retirement System satisfies the requirements of the Code of Virginia §51.1-800.

Certification

On the basis of the foregoing, we certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Guides to Professional Conduct, Amplifying Opinions, and supporting Recommendations and Interpretations of the American Academy of Actuaries.

Respectfully submitted,

MILLIMAN & ROBERTSON, INC.

Fiona E. Liston

Fiona E. Liston, F.S.A.
Consulting Actuary

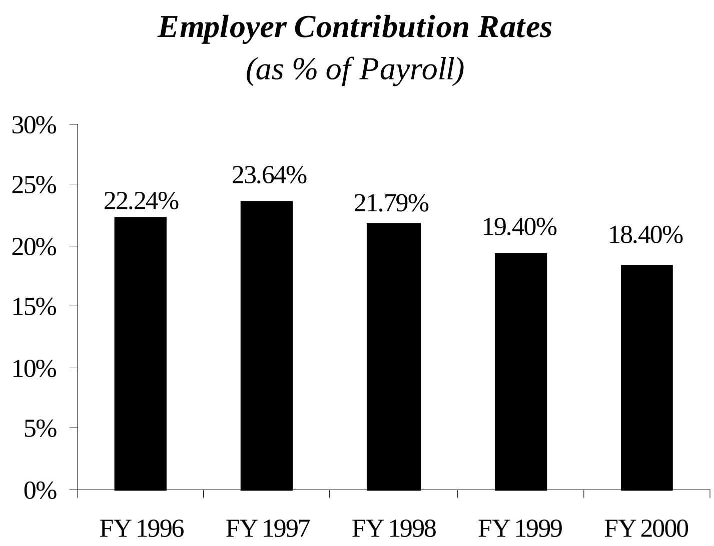
MILLIMAN & ROBERTSON, INC.

SUMMARY OF VALUATION RESULTS

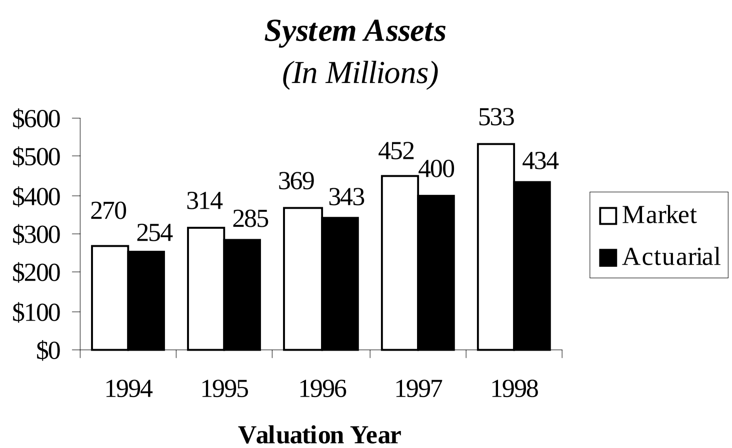
A. Overview

This report presents the results of our July 1, 1998 actuarial valuation of the Fairfax County Police Officers Retirement System.

The major findings of the valuation are summarized in the following charts.

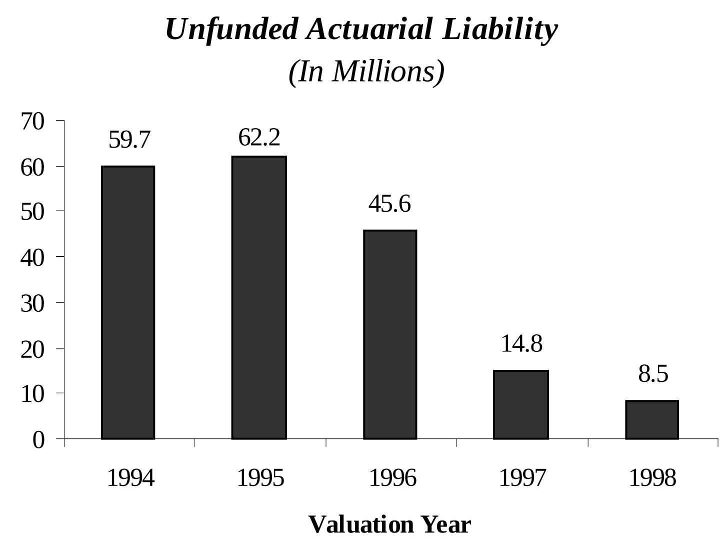


The employer contribution rate has dropped over the last three years, primarily due to investment performance.

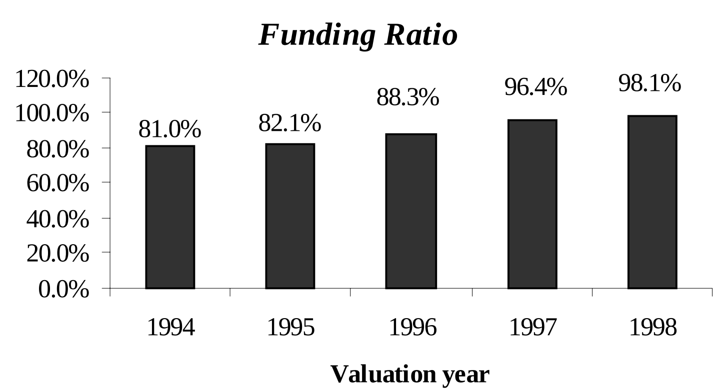


The System's assets have grown by about 14% per year since actuarial 1994. The $99 million difference between market and actuarial values provides a cushion against future possible adverse performance.

SUMMARY OF VALUATION RESULTS
(Continued)



The unfunded actuarial liability decreased over the last year. This was due to a combination of asset gains and liability gains.



The ratio of actuarial assets to the actuarial accrued liability increased over the past year. This is the GASB #25 measure of funding progress which replaces the PBO formerly reported.

B. Summary of Results

The table on the next page compares the principal results from the 1997 and 1998 valuations. The 1998 liabilities do not reflect any additional amounts for the potential impact of the policy change on light duty positions. Only the recommended contribution rate reflects this contingency.

SUMMARY OF VALUATION RESULTS
(Continued)

FAIRFAX COUNTY POLICE OFFICERS RETIREMENT SYSTEM
SUMMARY OF PRINCIPAL RESULTS

1. Participant Data	July 1, 1997	July 1, 1998	Percent Change
Number of:			
Active Members	1,037	1,030	- 0.7%
Retired Members and Beneficiaries	443	486	+ 9.7%
Disabled Members	43	46	+ 7.0%
Vested Former Members	1	2	+ 100.0%
Annual Salaries of Active Members	$46,595,459	$47,431,765	+ 1.8%
Annual Benefits for Retired and Disabled Members, and Beneficiaries	$13,881,226	$15,725,197	+ 13.3%
2. Assets and Liabilities			
Total Actuarial Liability	$ 414,534,604	$ 442,727,265	+ 6.8%
Assets for Cost Purposes	$ 399,772,825	$434,259,212	+ 8.6%
Unfunded Actuarial Liability	$ 14,761,779	$ 8,468,053	- 42.6%

3. Contribution Results *(as percent of payroll)*

Employer Normal Cost Rate	12.29%	12.29%
Unfunded Actuarial Liability Contribution	3.84	2.91
Administrative Expenses	0.30	0.30
Total Employer Contribution	16.43%	15.50%
Contingency for Policy Change in Light Duty Positions	2.97%	2.90%
Total Employer Contribution	19.40%	18.40%

SUMMARY OF VALUATION RESULTS
(Continued)

C. Valuation Highlights

1. System Assets

As of July 1, 1998, the System had assets at market value of $532.8 million, as compared to $452.4 million as of July 1, 1997. The increase of $80.4 million was attributable to the following:

- an increase of $17.6 million due to employer and member contributions;
- a decrease of $15.4 million due to payment of System benefits and expenses;
- an increase of $78.2 million due to System investment experience (realized and unrealized).

When measured on an actuarial basis for contribution purposes (in order to smooth the peaks and valleys of market fluctuations), System assets were $434.3 million as of July 1, 1998, up from $399.8 million as of July 1, 1997. For valuation purposes, we capture the market value of assets at July of each year. The 1998 stock market was near its all time high point by July 1, and had experienced a major correction by the end of the third quarter. There is a concern that the asset smoothing method in place would not be able to absorb a large drop in the asset value such as would be caused by the continuation of a severe market correction. On the basis of sensitivity testing, the Board of Trustees has decided to hold back $94 million from the market value in anticipation of such a correction.

Overall, the rate of return on System assets during the year was 17.3% on a market value basis and 8.1% on an actuarial basis.

2. System Liabilities

Two types of liabilities are presented in this report; actuarial liabilities and the liability for benefits accrued to date. Actuarial liabilities are developed and used for ongoing funding purposes and include a portion of future anticipated pay increases and service credit. This measure is also used as the measurement of actuarial accrued liability required to be disclosed under Government Accounting Standards Board Statement No. 25.

The liability for benefits accrued to date, which is used for accounting purposes, measures the present value of all future System benefits based on service to date. In this report we present a measure of the liability for benefits accrued which conforms with Statement No. 35 of the Financial Accounting Standards Board.

As of July 1, 1998, the System actuarial liabilities were $442.7 million, as compared to $414.5 million as of July 1, 1997. When measured against System assets (actuarial value) of $434.3 million, there are System unfunded actuarial liabilities of $8.5 million. This compares to $14.8 million of unfunded actuarial liabilities as of July 1, 1997.

Viewed another way, the ratio of assets to actuarial liabilities increased from 96.4% (July 1, 1997) to 98.1% (July 1, 1998).

With respect to the liabilities for benefits accrued as of the valuation date, this valuation shows a liability under FASB rules of $371.1 million as compared to $343.6 million as of July 1, 1997.

SUMMARY OF VALUATION RESULTS
(Continued)

Since these liabilities are based upon a current "snapshot" of members' pay and service, the common approach is to compare this liability with the market (i.e. current) value of System assets. This comparison as of July 1, 1998, shows that the ratio of System assets (market value) to liabilities accrued to date under FASB Statement 35 has increased from 131.7% to 143.6%.

3. System Contributions

Contributions to the System include a "normal cost rate" which is to cover a portion of projected liabilities on account of service of members during the year following the valuation date.

In addition, an unfunded actuarial liability contribution is made which, together with assets on hand, will fund the portion of projected liabilities on account of service rendered prior to the valuation date.

Finally, a provision for System administrative expenses is made by adding 0.30% of member payroll to the total contribution.

As determined by the valuation just completed, the employer normal cost rate is 12.29% of member payroll. The unfunded actuarial liability rate is 2.91% of payroll. Together with the administrative expense rate, this results in a total employer contribution rate as of July 1, 1998 of 15.50% of payroll compared with a July 1, 1997 rate of 16.43% of payroll. In addition to the calculated rate of 15.50%, we are recommending that an additional 2.90% be budgeted to account for the increase that might occur due to the implementation of the County's policy on light-duty positions.

The decrease in the employer contribution rate as a percentage of payroll is attributable to the following:

July 1, 1997, employer contribution rate	19.40 %
Decrease due to asset gains	(0.40)
Decrease due to actuarial experience gain	(0.92)
Increase due to ad-hoc COLA	0.39
Decrease in the Contingency for change in light-duty policy	(0.07)
July 1, 1998, employer contribution rate	18.40 %

4. Membership

The total active membership of the Police Officers Retirement System decreased by seven to 1,030. With respect to inactive members, the number of retired members and their beneficiaries has increased from 443 as of July 1, 1997 to 486 on July 1, 1998. The number of disabled members receiving benefits increased from 43 as of July 1, 1997 to 46 on July 1, 1998, and the number of former members with vested rights increased from 1 as of July 1, 1997 to 2 on July 1, 1998.

In total, the membership of the System, both active and inactive, has increased 2.6% from 1,524 members as of July 1, 1997 to 1,564 members as of July 1, 1998.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

1. Funding Method

The funding method used for this valuation is the "aggregate accrual modification of the entry age normal cost method." Under this method, the employer contribution has three components--the normal cost, the payment toward the unfunded actuarial liability, and the expense rate.

The normal cost is a level percent of pay cost which, along with the member contributions, will pay for projected benefits at retirement for the average plan participant. The level percent developed is called the normal cost rate and the product of that rate and payroll is the normal cost.

The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and funds accumulated as of the same date is referred to as the unfunded actuarial liability.

The expense rate is added to cover the System's administrative expenses.

2. Actuarial Value of Assets

For purposes of determining the County contribution to the plan we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long term nature of the actuarial valuation process.

In determining the actuarial value of assets, we calculate an expected actuarial value based on cash flow for the year and imputed returns at the actuarial assumption. This expected value is compared to the market value and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

3. Changes Since Last Valuation

None.

ACTUARIAL ASSUMPTIONS AND METHODS

Long Term Assumptions Used to Determine System Costs and Liabilities

1. Demographic Assumptions:

a. Mortality:

1994 Uninsured Pensioners Mortality Table
Annual Deaths Per 1000 Members*

Age	Male Deaths	Female Deaths	Age	Male Deaths	Female Deaths
20	1	0	65	16	9
25	1	0	70	26	15
30	1	0	75	40	24
35	1	1	80	67	42
40	1	1	85	105	73
45	2	1	90	164	125
50	3	2	95	251	200
55	5	2	100	341	297
60	9	5	105	441	415

*20% of deaths are assumed to be service-connected.

b. Termination of Employment (Prior to Normal Retirement Eligibility):

Annual Terminations per 1000 Members

Years of Service	Terminations
0	100
1	75
2	50
3	50
4	30
5 or more	15

It is assumed that members who terminate before normal or early retirement age elect to receive a refund of contributions instead of vested benefits.

ACTUARIAL ASSUMPTIONS AND METHODS
(Continued)

c. Disability:

	Annual Disabilities per 1,000 Members*	per 1,000 Members for Light-Duty Contingency**		Annual Deaths Per 1,000 Disabled Members
Age	Male and Female		Age	Male and Female
25	2	5	45	43
30	2	5	50	48
35	2	5	55	53
40	2	6	60	58
45	4	11	65	64
50	6	17	70	73
55	6	17	75	89
60	6	17	80	107

*70% of disabilities are assumed to be service-connected, and are assumed to receive Workers Compensation benefits.

**Assumes that 3 Light-Duty officers per year are expected to receive benefit.

d. Retirement:

Years of Service	Probability of Retirement: Hired pre--7/1/81	Hired post-7/1/81
20	25%	N/A
21	25%	N/A
22	25%	N/A
23	25%	N/A
24	25%	N/A
25	25%	25%
26	25%	25%
27	25%	25%
28	25%	25%
29	25%	25%
30	100%	100%

ACTUARIAL ASSUMPTIONS AND METHODS
(Continued)

e. Merit/Seniority Salary Increase (in addition to across-the-board increase):

Years of Service	Merit/Seniority Increase
0	4.0%
5	4.0%
10	1.7%
15	1.4%
20	1.1%
25	0.8%
30	0.5%

f. Family Composition:

For purposes of valuing the pre-retirement death benefit, an assumption concerning how many employees are married is needed. The assumption used in this valuation is that 80% of employees are married at death while active and that the female spouse is 5 years younger than the male spouse. In addition, each married employee is assumed to have two children, 22 and 24 years younger than the employee.

g. Sick Leave Credit:

It is assumed that retirees, deferred vested terminations, and deceased members receive an additional 3% of service credit due to sick leave.

ACTUARIAL ASSUMPTIONS AND METHODS
(Continued)

2. Economic Assumptions

a. **Investment Return:** 7.50% compound per annum.

b. **Cost-of-Living Benefit Increases:** 3.00% compound per annum.
(Based on assumed CPI increase of 4%.)

c. **Across-the-Board Increase in County Salaries:** 4.00% compound per annum.

d. **Total Payroll Increase (for amortization):** 4.00% compound per annum.

e. **Administrative Expenses:** 0.30% of payroll.

3. Changes Since Last Valuation

None.

ANALYSIS OF FINANCIAL EXPERIENCE

Gains and Loss in Accrued Liability During Years Ended June 30
Resulting from Differences Between Assumed Experience and Actual Experience

	Gain (or Loss) for Year ending June 30,			
Type of Activity	**1995**	**1996**	**1997**	**1998**
Investment Income	$5,183,400	$11,064,878	$26,316,711	$2,262,366
Combined Liability Experience	1,969,628	6,896,962	3,274,850	5,167,343
Gain (or Loss) During Year from Financial Experience	$7,153,028	$17,961,840	$29,591,561	$7,429,709
Non-Recurring Items	(16,544,874)	(8,161,405)	0	(2,195,961)
Composite Gain (or Loss) During Year	**($9,391,846)**	**$9,800,435**	**$29,591,561**	**$5,233,748**

SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

	Added to Rolls		Removed From Rolls		On Rolls @ Yr. End			
Year Ended June 30	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance	% Increase Allowance	Average Allowance
1994					408	10,366,273		25,408
1995	48	1,996,537	17	337,571	439	12,025,239	16.00%	27,392
1996	21	817,684	7	138,637	453	12,704,286	5.65%	28,045
1997[1]	39	1,309,515	6	132,576	486	13,881,225	9.26%	28,562
1998	52	1,942,183	6	98,211	532	15,725,197	13.28%	29,559

[1]End of year allowance for 1997 is being restated.
Other elements were changed to agree with new balance.

SOLVENCY TEST

Aggregate Accrued Liabilities For

Valuation Date	(1) Active Member Contributions	(2) Retirees Vested Terms, Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
7/1/93	$ 36,310,862	$ 131,920,970	$ 118,492,700	$ 230,962,091	100%	100%	53%
7/1/94	40,263,035	157,869,733	113,479,164	253,506,303	100%	100%	49%
7/1/95	40,220,658	182,268,442	124,223,776	284,506,069	100%	100%	50%
7/1/96	44,117,091	202,684,707	142,115,315	343,288,369	100%	100%	68%
7/1/97	47,116,095	220,184,346	147,234,163	399,772,825	100%	100%	90%
7/1/98	48,387,340	249,724,374	144,615,551	434,259,212	100%	100%	94%

SCHEDULE OF ADDITIONS BY SOURCE AND DEDUCTIONS BY TYPE

ADDITIONS

Fiscal Year	Plan Member Contributions	Employer Contributions	Employer Contributions % of Covered Payroll	Net Investment Income	Total Revenues
1994	$ 5,219,182	$ 9,560,424	22.20%	$ 4,692,988[1]	$ 19,472,594
1995	5,478,181	10,013,355	21.89%	39,699,044[1]	55,190,580
1996	5,874,078	10,912,200	22.24%	50,837,320	67,623,598
1997	6,030,834	11,892,690	23.64%	79,291,566	97,215,090
1998	6,235,043	11,321,194	21.79%	78,218,263	95,774,500
1999	6,861,605	10,685,734	19.40%	42,983,245	60,530,584

DEDUCTIONS

Fiscal Year	Benefit Payments	Refunds of Contributions	Administrative Expenses	Total Expenses
1994	$ 9,437,482	$ 287,773	$ 234,302[2]	$ 9,959,557
1995	10,918,230	217,976	228,122[2]	11,364,328
1996	12,421,488	415,766	175,394	13,012,648
1997	13,252,630	268,755	140,522	13,661,907
1998	14,765,658	476,784	153,738	15,396,180
1999	16,428,235	464,747	158,989	17,051,971

[1] The net investment income for 1994-95 has been restated from amounts previously reported to recognize investment expenses and the change in unrealized gain occurring each year.

[2] Administrative expenses for 1994-95 are net of an expense allocation to investment expense. Investment expense has been deducted in the computation of Net Investment Income.

SCHEDULE OF BENEFIT PAYMENTS BY TYPE

Fiscal Year Ended June 30	Annuity	Service-Connected Disability	Ordinary Disability	Survivor	Total
1994	$ 7,986,865	$ 902,363	$ 80,775	$ 467,479	$ 9,437,482
1995	9,458,977	839,990	83,159	536,104	10,918,230
1996	10,882,682	822,283	96,212	620,311	12,421,488
1997	11,610,814	815,848	98,785	727,183	13,252,630
1998	12,939,235	906,259	100,147	820,017	14,765,658
1999	14,435,055	1,030,037	102,885	860,258	16,428,235

SCHEDULE OF RETIRED MEMBERS BY BENEFIT TYPE

Fiscal Year Ended June 30	Annuity	Service-Connected Disability	Ordinary Disability	Survivor	Total
1994	321	41	7	39	408
1995	354	36	7	42	439
1996	368	33	8	43	452
1997	388	35	8	55	486
1998	431	38	8	55	532
1999	459	38	8	55	560

SCHEDULE OF AVERAGE MONTHLY BENEFIT AMOUNTS

Fiscal Year Ended June 30	Annuity (including supplement)	Service-Connected Disability	Ordinary Disability	Survivor	Average (basic benefit only)
1994	$ 2,289	$ 1,889	$ 991	$ 1,149	$ 2,117
1995	2,473	1,930	1,055	1,188	2,283
1996	2,476	2,027	1,006	1,208	2,297
1997	2,603	2,002	1,049	1,243	2,380
1998	2,671	2,121	1,068	1,276	2,463
1999	2,753	2,362	1,095	1,310	2,563